

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) **BOARD AND CODE ADMINISTRATION DIVISION**

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

HercuWall Inc. 1720 W. 10th Street, Suite 101 Tempe, AZ 85281

Scope: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: HercuWall Composite Wall Panel System

APPROVAL DOCUMENT: Drawing No. 12-03, titled "EPS/Concrete Composite Wall System", Sheets 1 through 8 of 8, dated 05/01/2012, with revision A dated 09/04/2012, prepared by Al-Faroog Corporation. signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

LABELING: A permanent label with the manufacturer's name or logo, Orlando, FL, model/series, and the statement reading 'Miami-Dade County Product Control Approved' is to be located on each panel.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned

The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY APPROVED

1 1/01/2012

NOA No. 12-0607.03 **Expiration Date: November 8, 2017** Approval Date: November 8, 2012

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. 12-03, titled "EPS/Concrete Composite Wall System", Sheets 1 through 8 of 8, dated 05/01/2012, with revision A dated 09/04/2012, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

- 1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a concrete composite solid wall, prepared by Hurricane Engineering & Testing, Inc, Test Report No. **HETI-11-3316**, dated 04/26/2012, signed and sealed by Rafael E. Droz-Seda, P.E.

- 2. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a concrete composite wall with large window opening, prepared by Hurricane Engineering & Testing, Inc, Test Report No. **HETI-11-3320**, dated 04/26/2012, signed and sealed by Rafael E. Droz-Seda, P.E.

- 3. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a concrete composite wall with large door opening, prepared by Hurricane Engineering & Testing, Inc, Test Report No. **HETI-11-3324**, dated 04/26/2012, signed and sealed by Rafael E. Droz-Seda, P.E.

- 4. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a concrete composite wall with small window opening, prepared by Hurricane Engineering & Testing Inc, Test Report No. **HETI-12-4005**, dated 04/26/2012, signed and sealed by Rafael E. Droz-Seda, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 12-0607.03

Expiration Date: November 8, 2017 Approval Date: November 8, 2012

HercuWall Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (Continued)

- 5. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a concrete composite wall with garage door opening, prepared by Hurricane Engineering & Testing, Inc, Test Report No. **HETI-12-4008**, dated 04/26/2012, signed and sealed by Rafael E. Droz-Seda, P.E.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

- 1. Test reports on compressive strength Test of cylindrical concrete specimens per ASTM C39, prepared by Hurricane Engineering & Testing, Inc, Test Report No. **HETI-12-C100** and **HETI-11-C174**, both dated 02/16/2012, signed and sealed by Rafael E. Droz-Seda, P.E.
- 2. Test reports on Tensile Strength Test of steel shear strips per ASTM E8, prepared by Hurricane Engineering & Testing, Inc, Test Report No. **HETI-12-T107** and **HETI-11-T125**, dated 04/26/2012 and 02/16/2012 respectively, signed and sealed by Rafael E. Droz-Seda, P.E.

F. STATEMENTS

1. Statement letter of code conformance to 2010 FBC and no financial interest issued by Al-Farooq Corporation, dated 06/06/2012, signed and sealed by Javad Ahmad, P.E.

G. OTHER

1. Test proposal No. 11-0631.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 12-0607.03

Expiration Date: November 8, 2017 Approval Date: November 8, 2012

COMPONENTS SPECIFICATIONS

CONCRETE

READY-MIXED CONCRETE FOR WALL PANELS SHALL MEET ALL REQUIREMENTS OF ACI 301, CEMENT.

U.N.O. MINIMUM STRENGTH AT 28 DAYS SHALL BE 3000 PSI., MAXIMUM AGGREGATE SIZE IS 3/8" OR ROCK MIX.

HYDRAULIC GROUT PUMP WITH A 3" OR SMALLER DISCHARGE REDUCED TO 2" OR 1-1/2" HOSE AT DELIVERY POINT.

REBAR REINFORCEMENT

USE ASTM A615 GRADE 60 FOR REINFORCEMENT.

LAP SPLICES TO BE A MINIMUM OF 48 BAR DIAMETERS.

VERTICAL REBAR IS NOT REQUIRED WITH WALL PANELS AS VERTICAL REINFORCING IS INTEGRAL TO THE SYSTEM (SHEAR STRIP).
TWO CONTINUOUS HORIZONTAL REBAR REINFORCEMENTS SHALL BE PLACED WITHIN THE BOND BEAM AT TOP OF THE WALL WITHIN INTEGRAL PLASTIC HANGERS.

BAR DIAMETERS SHALL BE MINIMUM 1/2"(#4) OR HIGHER AS SPECIFIED BY THE ENGINEER OF RECORD.

SHEET METAL COMPONENTS

ALL SHEET METAL COMPONENTS INCLUDING SHEAR STRIP, TOP CAP, BASE TRACK, HEADER TRIM, WINDOW AND DOOR TRIM EXTERIOR AND INTERIOR SILL COVER SHALL BE MANUFACTURED FROM 24 GA. GALVANIZED COLD ROLLED STEEL.

GALVANIZED COATING SHALL BE A MINIMUM OF G-90 PER ASTM A653. STEEL USED IN THE MANUFACTURE OF SHEAR STRIPS IS SPECIFIED AT 50 KIPS YIELD STRENGTH, PER AISI 1010, ASTM A 109. STEEL USED IN ALL OTHER SHEET METAL COMPONENTS SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KIPS.

OUTER PANEL SKIN COATED WITH LATEX PRIMER AND SEALER.

DIAMOND MESH (FOR STUCCO FINISH)

DIAMOND MESH SHALL BE OF THE 'V' GROOVE 'SELF FURRING' LATH VARIETY. TYPE 2.5 LBS (PER SQ. YD.), GALVANIZED PER TABLE 3, NOTATION 'C' ASTM C1063-08.

SELF-FURRING DIAMOND MESH SHALL BE INSTALLED HORIZONTALLY AND ATTACHED TO SHEAR STRIPS WITH #8 X 1/2" SELF DRILLING SCREWS AT 6" O.C. VERTICALLY AND OVERLAPPED A MINIMUM OF 2 IN.

IMPACT TAPE (OPTIONAL TO DIAMOND MESH)

DECKER BRAND 43 OR EQUAL.

- 9 MIL POLYETHYLENE BACKING WITH A SYNTHETIC RUBBER ADHESIVE 8" WIDE TAPE APPLIED IN BETWEEN CONCRETE STUDS ON THE EXTERIOR OF THE WALL.
- 4" WIDE TAPE APPLIED OVER THE VERTICAL AND HORIZONTAL WIND SHEAR STRIPS ON THE EXTERIOR OF WALL.

SCREW

ALL SCREWS CONNECTING SHEET METAL COMPONENTS SHALL BE ZINC PLATED OR GALVANIZED STEEL, #8 DIAMETER MIN. 1/2" LENGTH, SELF DRILLING TAPPING AND SHALL CONFORM TO SAE J 78 OR EQUAL.

SCREWS FOR STEEL-TO-STEEL CONNECTIONS SHALL BE INSTALLED WITH A MIN. EDGE DISTANCE AND CENTER-TO-CENTER SPACING OF 1/2", SHALL BE SELF DRILLING TAPPING AND SHALL CONFORM TO SAE J 78.

<u>FOAN</u>

FOAM FOR WALL PANELS IS MANUFACTURED FROM EXPANDED POLYSTYRENE (EPS) AND SHALL HAVE
MINIMUM DENSITY = 1.03 PCF
MAX. FLAME SPREAD RATING = 10 AS PER ASTM E-84
SMOKE DEVELOPED INDEX = 130
SPONTANEOUS IGNITION TEMPERATURE = 752° F.

CAULK

CONTINUOUS 1/8" BEAD OF CAULK APPLIED ON ALL JOINTS BETWEEN PANEL FORMS FROM T.O.W. TO BASE.

CAULK SHALL BE SILICONE VARIETY WITH A 100 YEAR WARRANTY.

HERCUWALL COMPOSITE WALL PANEL SYSTEM

MAXIMUM DESIGN LOAD RATING = ± 55.0 PSF

MAX. SHEAR F	PARALLEL TO WALL PANEL
WALL HEIGHT	SHEAR IN Lbs PER LINEAR FT.
8 FT.	84
9 FT.	75
10 FT.	67

	MAX. AXIAL C	OMPRI	ESSIO	N AND	TEN	ISION					
STUD SPACING	COMPRESSION I	N Lbs	PER	LINEAR	FT.	TENSION	IN	Lbs	PER	LINEAR	FT.
8 IN.		4320						63	88		
9-1/2 IN.		3600						53	24		
12 IN.	2880				4259						

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2010 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

ALL ELECTRICAL, MECHANICAL DETAILS AND FIRE RATING PROVISIONS ARE NOT PART OF THIS APPROVAL AND SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER AND REVIEWD BY CORRESPONDING BUILDING DEPARTMENT.

HERCUWALL COMPOSITE WALL SYSTEM IS DESIGNED AND TO BE INSTALLED AS AN EXTERIOR OR INTERIOR BEARING OR NON BEARING WALL.

THIS PRODUCT CONTROL APPROVAL IS FOR THE WALL PANELS AS SHOWN ON THESE APPROVED DRAWINGS.
BUILDING DIMENSIONS, DETAILS, UPLIFT, FOUNDATIONS, ROOF AND OTHER

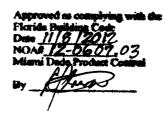
ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER AND REVIEWED BY THE STRUCTURAL PLANS EXAMINAR OF THE CORRESPONDING BUILDING DEPARTMENT.

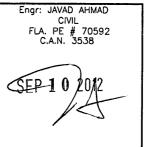
DISSIMILAR MATERIALS IN CONTACT WITH EACH OTHER SHALL BE PROTECTED IN ACCORDANCE WITH 2010 FLORIDA BLDG. CODE SECTION 2220.

DESIGN IS BASED ON TESTING IN ACCORDANCE WITH FLORIDA BUILDING CODE LARGE MISSILE IMPACT TEST, TAS 201-94.
CYCLIC WIND PRESSURE TEST, TAS 203-94.
STATIC AIR PRESSURE TEST, TAS 202.
AIR INFILTRATION TEST, ASTM E283-04
WATER INFILTRATION TEST, ASTM E331-00

HERCUWALL COMPOSITE PANELS HAVE BEEN TESTED WITH INTERIOR 1/2" THK. GYPSUM BOARDS ATTACHED TO SHEAR STRIPS WITH #6 X 1-1/4" S.M.S. AT 12" O.C. VERTICALLY.

THIS PRODUCT APPROVAL DOCUMENT IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT.





05) 262-6978

CORPORATION
OUCT DEVELOPMENT
174

1235 S.W. 87 AVE MIAMI, FLORIDA 3317 TEL. (305) 264-8100

SYSTEM

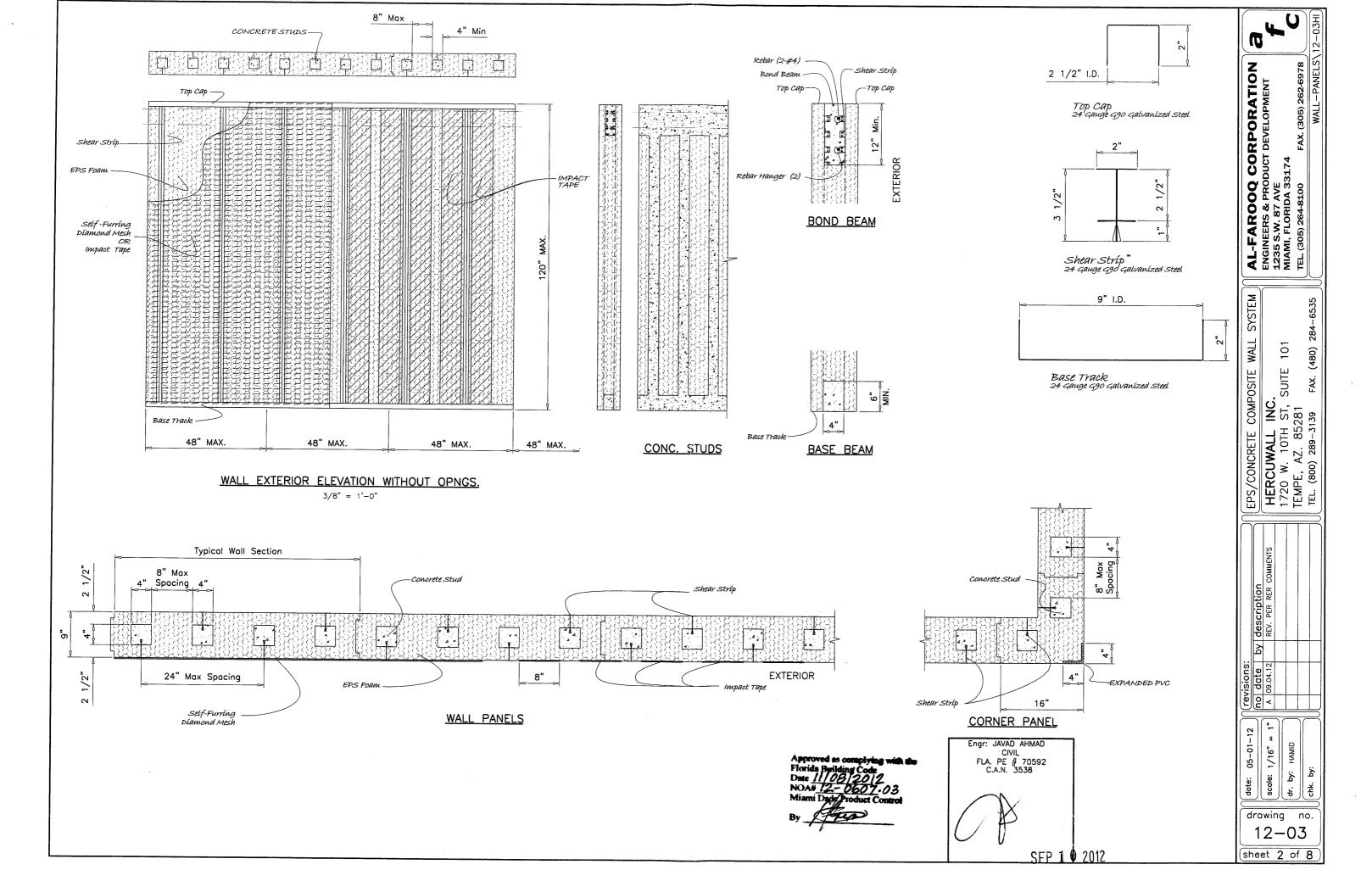
COMPOSITE

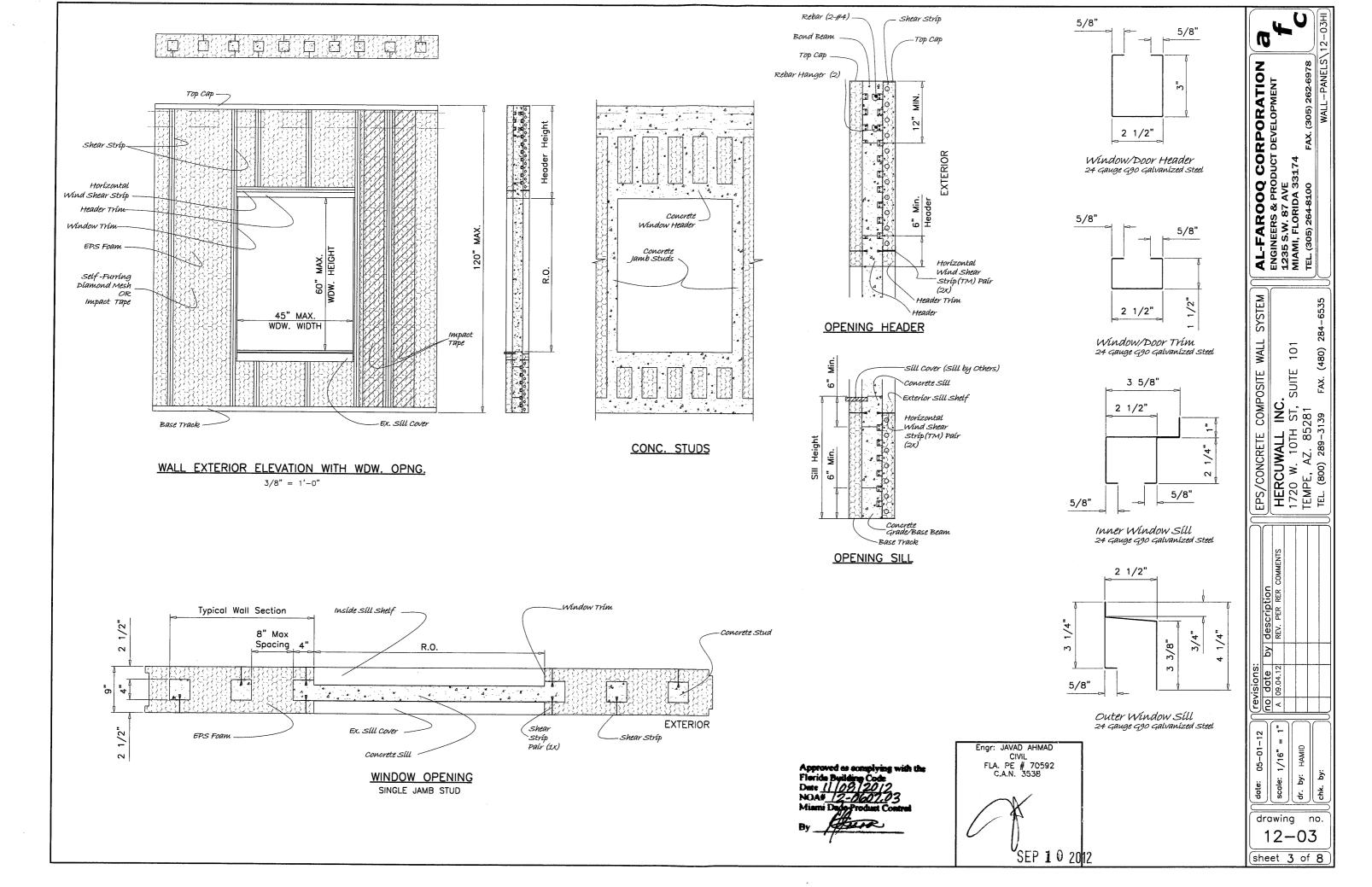
HERCUWALL INC. 1720 W. 10TH ST, SUITE 101 TEMPE, AZ. 85281 TEL. (800) 289-3139 FAX. (480) 284-65

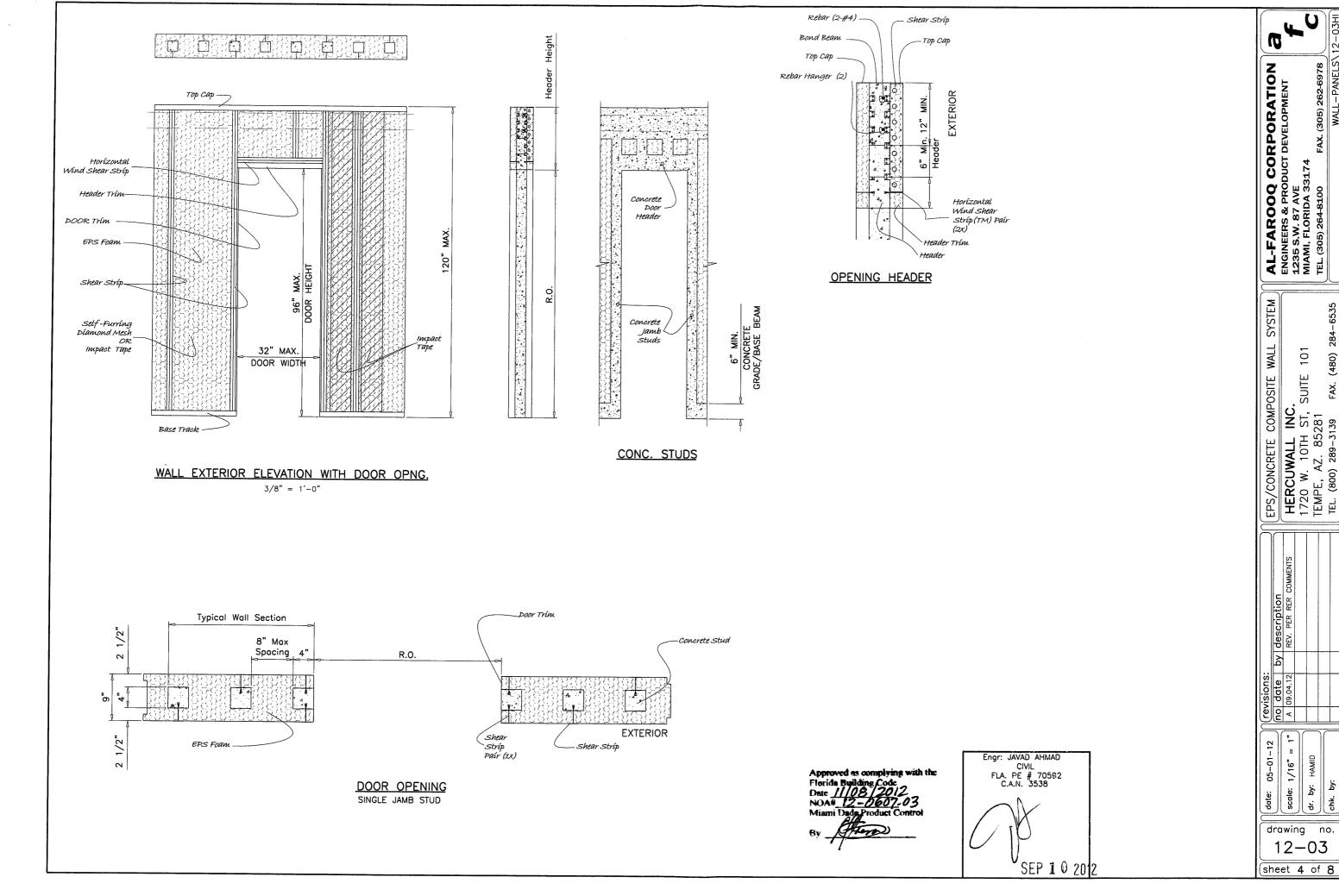
date: 05-01-12 (revisions:

drawing no. 12-03

sheet 1 of 8







U

284-6535

(480)

FAX.

101

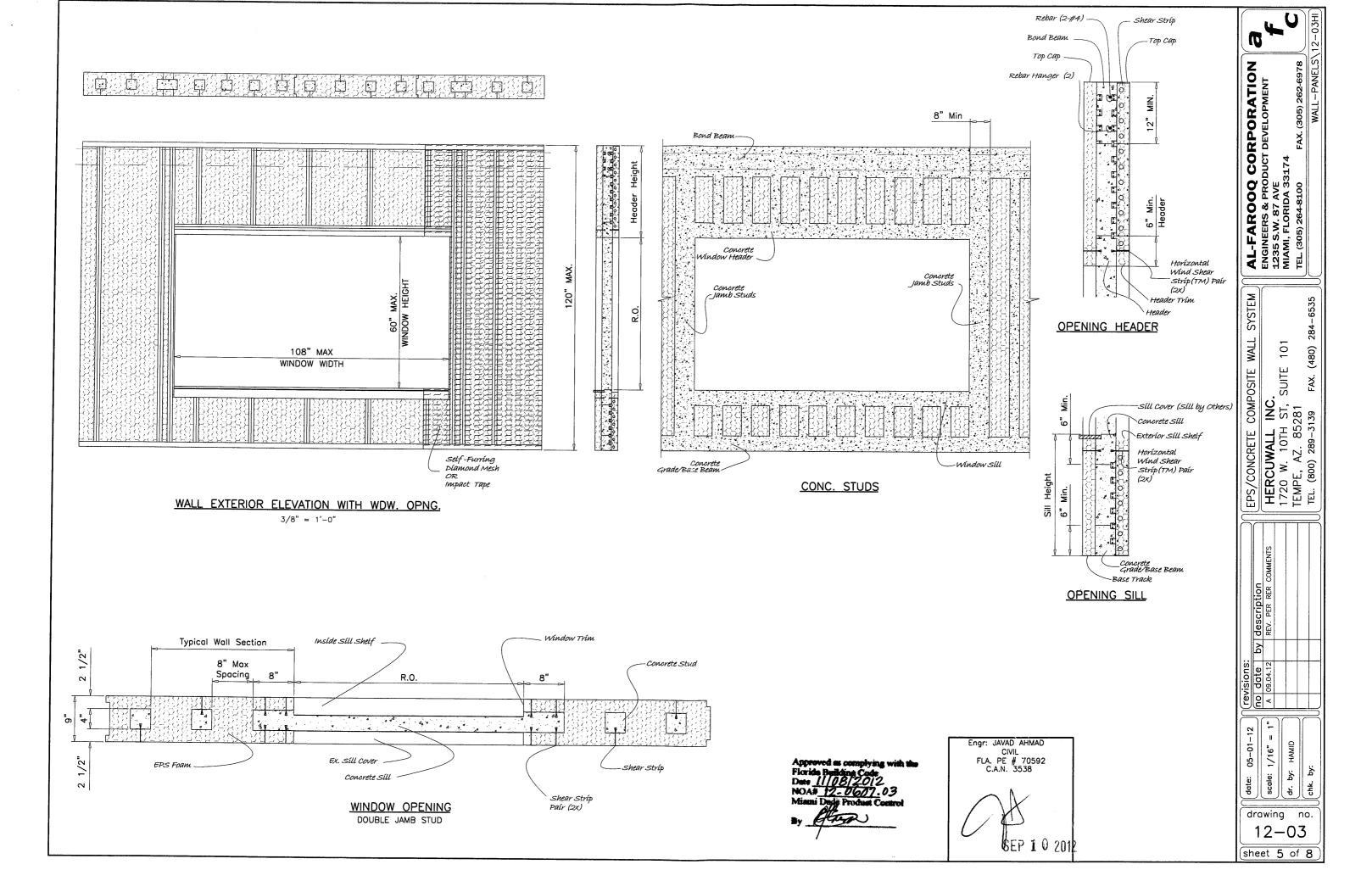
SUITE

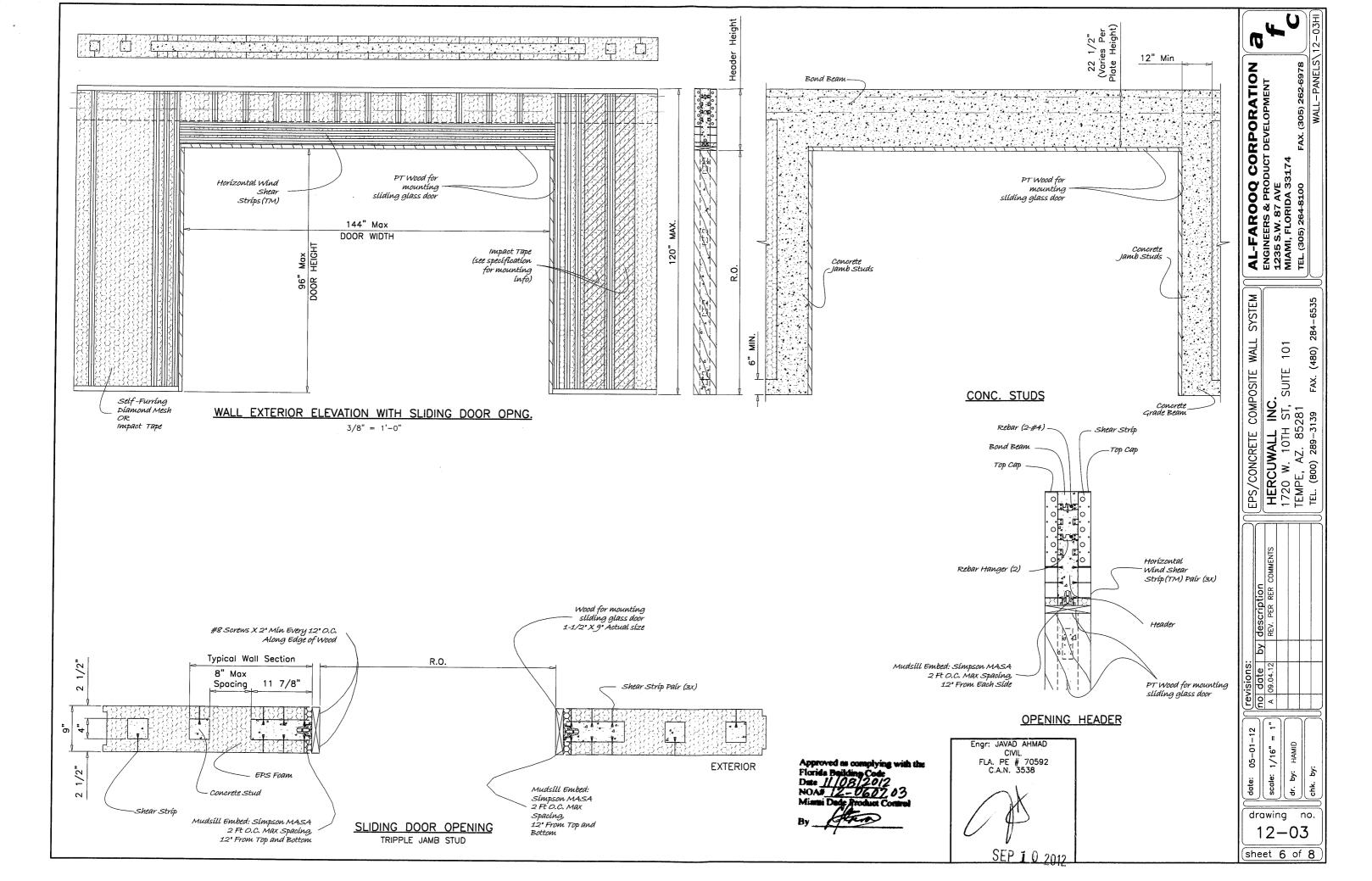
HAMID 1/16"

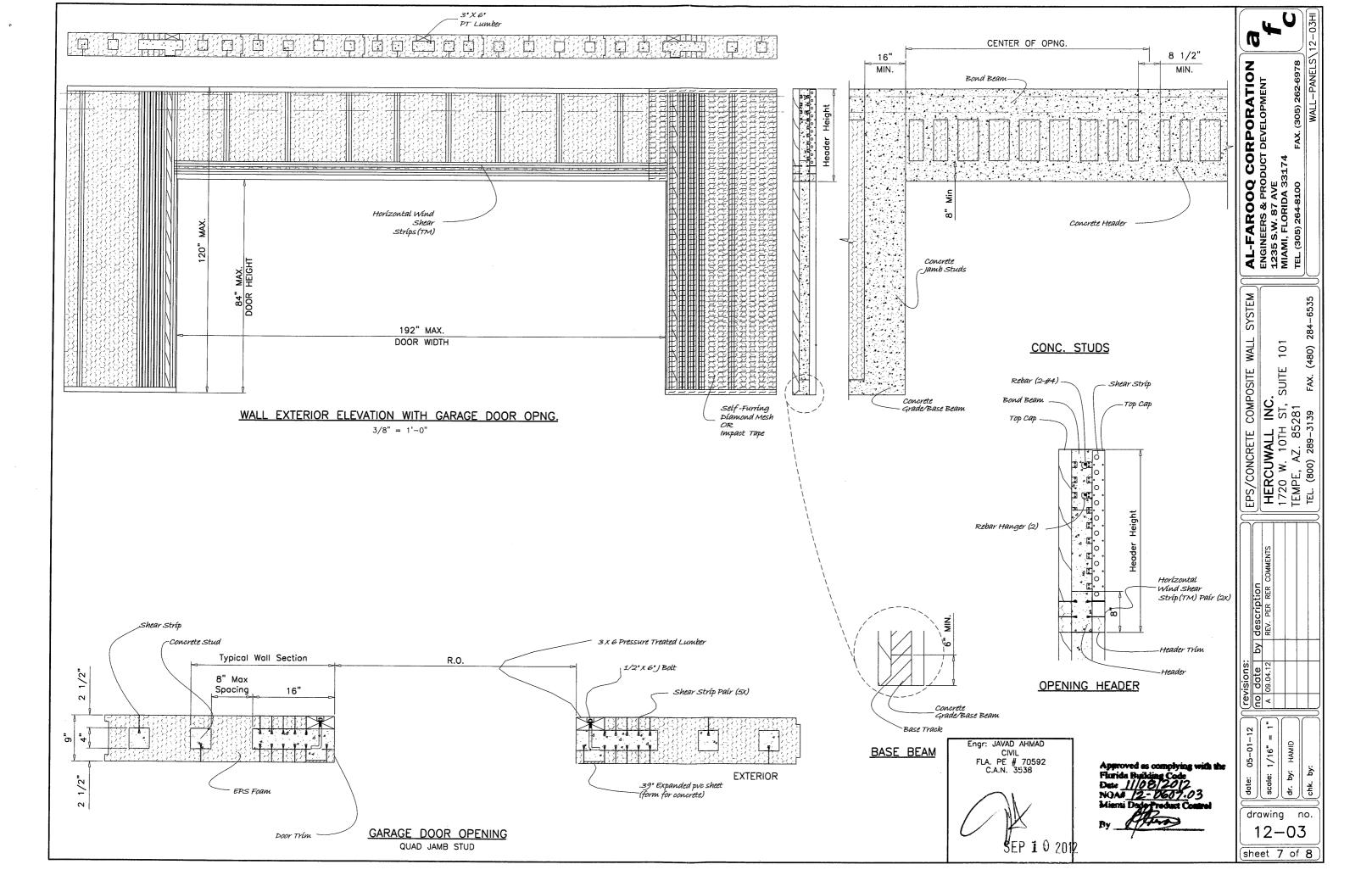
scale:

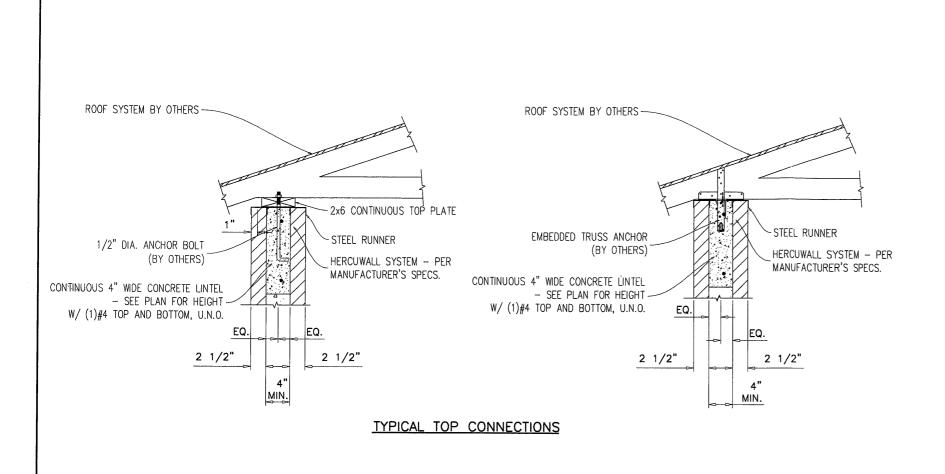
څ <u>ئ</u>

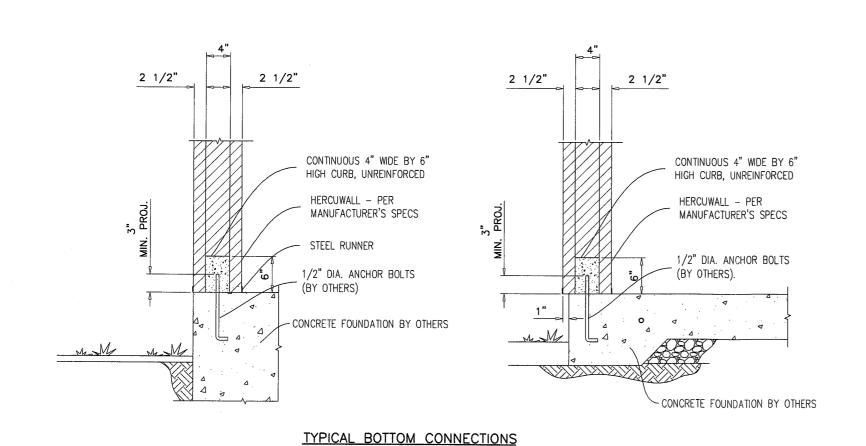
ch. Ą.

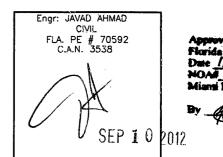














WALL EPS/CONCRETE COMPOSITE W
HERCUWALL INC.
1720 W. 10TH ST, SUITE 1
TEMPE, AZ. 85281
TEL. (800) 289–3139 FAX. (48 description REV. PER RER C revisions: no date A 09.04.12 05-01-12 date: 05–01–
scale: 1/16" =
dr. by: HAMID

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 262-6978
C

drawing no. 12-03